

REMARKS

This application is a continuation application under 37 CFR 1.53(b) of Application Serial No. 09/029,549, filed March 6, 1998 (the parent application). Entry of the above amendments before the first action is respectfully requested.

Claims 1-33 were originally filed with this application. By this amendment, Applicant amends claims 1, 11, 12, 14-17, 20-23, 29, 30, and 33, and adds claims 34-38. As a result, claims 1-38 remain pending in this application, with claims 1, 11, 14, and 27 being independent.

Telephone Interview

Applicant's representatives appreciate the courtesy of Examiner Peterson in conducting a telephone interview in the parent application on July 18, 2001. During the telephone interview, one of the Applicant's representatives read to the Examiner some proposed language to add to claim 11 to more clearly distinguish over the art of record. Applicant's representative explained that this proposed language was exemplary of similar language that Applicant proposes adding to the other independent claims 1, 14 and 27.

During the telephone interview, Examiner Peterson indicated that he believed that the feature described on page 2, lines 6-7 of the written description of the specification: "reading a code on the paper by means of a reader" distinguishes over the prior art. Applicant's attorney's pointed out that claims 17, 22, 23 and 30, which were directed to the feature, were restricted as part of Group V in an earlier Office Action. It then was discussed how to shift election from the originally-elected Group VI to restrict the Group V.

The Examiner indicated that he believes such language would distinguish claim 11 over the art of record, but that he would have to more carefully review the art of record to make such a determination.

Examiner Peterson indicated that because the application was After Final, a Continued Prosecution Application (CPA) would have to be filed to shift election. After reviewing the file history, however, Applicant has determined that a CPA can no longer be filed in this application because a CPA was already filed on June 14, 2000, after the date specified by 37 C.F.R. 1.53(d)(1)(i)(A).

Accordingly, Applicant filed this continuation application under 37 C.F.R. 1.53(b). The claims as filed in this continuation application are the claims that were pending in the

parent application before the parent application became abandoned, including the claims that were previously restricted.

By this preliminary amendment, Applicant amends claim 11 by adding the language proposed during the July 18 telephone interview, and amends independent claims 1, 14, and 27 by adding similar language.

Claims 24-26 and 33 Satisfy the Requirements of 35 U.S.C. §112, First Paragraph

Applicant discloses in the written description of the specification that “[P]erforation in the direction of movement can be performed under control, limited to a specific distance, and on selected sheets. Moreover, the perforation may be given the desired length on each sheet.” (Page 2, lines 1-3).

Further, such disclosure was included in the parent application **as originally filed on March 6, 1998**, on page 1, line 36-page 2, line 2.

Therefore, Applicant respectfully submits that the application as originally filed provides support for claims 24-26 and 33.

Claims 1-10, 24 and 34-36 are Patentable Over the Art of Record

Claim 1 is patentable over the art of record for at least the following reasons.

Discussion of Katz

Applicant’s remarks concerning U.S. Patent No. 2,821,915 (Katz) in the parent application are hereby incorporated by reference.

As discussed in the parent application, Katz is directed to a mechanism for slitting, scoring or perforating and more particularly is directed to providing an attachment for sheet-bed printing presses for slitting, scoring or perforating selected ones of the sheets being fed through the press (col. 1, lines 15-19).

Significantly, the number of sheets of a group of sheets that the mechanism of Katz selectively perforates are **predetermined** before the sheets are received by the mechanism. Specifically, the gear ratio is **preconfigured** to perforate a certain number of sheets out of a group of sheets.

Discussion of Moll

Published European Patent Application No. 658,406 A1 (Moll) is directed to an apparatus that applies a line of perforations at a selected location and length to a sheet of paper while it is traveling through a machine. The principal object of Moll is to provide a perforation apparatus in a folding or other paper processing machine that provides a line of perforations of controlled length. (col. 2, lines 48-57).

Moll discloses a panel 42 that has an L.E.D. light (LEDR) to indicate a controller 37 is ready to accept another sheet of paper 30. The controller 36 has a make ready/hold toggle switch (TS) which allows an operator to jog a sheet of paper 30 into position for a single perforation cycle, so that the operator can observe where a line of perforation will start and stop. Three sets of switches SWI, SWII, and SWIII are also provided. SWI sets the delay in inches from the edge of a sheet 30 being detected to the start of a line of perforations. SWII sets the distance in inches (time) from the start to the stop of operations. SWIII sets the overall size in inches of the full length of a sheet 30 (lockout) from the time it is detected through its full length color so that the full apparatus only cycles once per sheet 30. (Col. 4, line 56-col. 5, line 16; Fig. 1)

Moll discloses that **after settings have been made** to the panel 42 and checked, sheets of paper 3 are fed onto roller 11, which transports them to plate 60 in between fold rollers 58 and 65 and between wheel 76 and female collar 80. When the edge of a sheet 30 is detected by the sheet detector 41, the controller 36 is signaled by the sheet detector 41 which caused the controller to energize the solenoid 71, which moves the arm 73 and the wheel 76 vertically downwardly until it contacts a sheet 30 and starts a line of perforations 78. The operation continues until the sheet 30 has traveled the preset delayed time. The operation continues with a line of perforations 78 placed **on each sheet 30**. (Col. 6, lines 35-55).

Significantly, although Moll discloses **presetting** switches SWI, SWII AND SWIII **before** feeding sheets of paper onto a roller, and then perforating **each sheet** of paper, Moll does not disclose or suggest selectively perforating a sheet of paper of a group of sheets, where sheets to be perforated are selected as the group is moving through the perforator.

Discussion of Maher

Published UK Patent Application No. 2,213,755 A (Maher) is directed to an apparatus for perforating, slitting, top scoring, or otherwise locally weakening sheet material. (Page 1, lines 1-3).

Maher discloses that a control unit 26 comprises a power supply, an active count register, a **preselected** memory register, and a signal duration unit. The active count register total is compared with a figure dialed into the **preselected memory register**. If the registers agree, then an electric signal is applied to the signal duration unit and the active count register is re-set to zero. (Page 3, line 27-page 4, line 7; Figure).

It is the control unit 26 that controls activation of the solenoid 24, that controls the valve member 22, that controls movement of the piston 18 and piston rod 17, which controls the movement of the arm 11 which controls the wheel 10 to contact/release from a backing member 14 as a sheet of paper passes 15. (Page 2, line 18-page 5, line 12; The Figure).

Significantly, although Maher discloses that the control unit includes a **preselected** memory to control perforation of a sheet of paper by the wheel, Maher does not disclose or suggest selectively perforating sheets of paper of a group of sheets where the sheets to be perforated are selected as the group is moving through the perforator.

Claim 1 is Patentable Over the Art of Record

Claim 1 as amended recites a perforator for selectively perforating sheets of paper of a group of sheets, wherein **sheets to be perforated are selected as the group is moving successively through the perforator**, the perforation being along a direction of the movement. Claim 1 further recites that the perforator comprises a first perforating tool past which one or more sheets of paper move successively, the first perforating tool having a perforating position to perforate paper passing the perforating tool, and having a neutral position to refrain from perforating the paper passing the perforating tool, and having an input for receiving a first control signal, and an electronic control apparatus having an input to receive a second control signal **as the group of sheets moves through the perforator**, and an output connected to the input of the first perforating tool, wherein, for each sheet of paper that passes through the perforating device, the second control signal is **based on information specific to the sheet**. Claim 1 further recites that, wherein, the electronic control apparatus is configured such that, for each sheet of paper that passes the first

perforating device, if perforation is desired for the sheet based on the second control signal, the electronic control apparatus emits a signal from the output of the electronic control apparatus to the input of first perforating tool to place the first perforating tool in the perforating position, and if perforation is not desired for the page based on the second control signal, the electronic control apparatus does not emit a signal to the first perforating tool.

Claim 1 is patentable over the art of record because the references of the art of record, alone or in combination, fail to disclose or suggest the perforator recited in claim 1.

Specifically, the art of record fails to disclose or suggest a perforator for selectively perforating sheets of paper of a group of sheets, wherein sheets to be perforated are selected as the group is moving selectively through the perforator, the perforator comprising, inter alia, an electronic control apparatus having an input to receive a second control signal as the group of sheets moves through the perforator, and an output connected to the input of the first perforating tool, wherein, for each sheet of paper that passes the first perforating device, the second control signal is based on information specific to the sheet, as recited in claim 1.

As stated above, Katz, Moll and Maher each disclose perforators for which the sheets or a group of sheets to be perforated are predetermined, that is, determined before the group of sheets moves through the device.

For at least the reasons set forth above, claim 1 is patentable over the art of record. Accordingly, Applicant respectfully submits that claim 1 is in condition for allowance.

Claims 2-10, 24 and 34-36, which each depend directly or indirectly from claim 1, are patentable over the art of record for at least the same reason stated above with respect to claim 1. Accordingly, Applicant respectfully submits that claims 2-10, 24 and 34-36 are in condition for allowance.

Further, claim 35 is patentable over the art of record because the art of record does not disclose or suggest the perforator as recited in claim 1, wherein, for each sheet of paper that passes the perforating device, the second control signal is based on a code on the sheet of paper, as recited in claim 35.

Claim 36, which depends directly from claim 35, is patentable for at least the same reasons as set forth above with respect to claim 35. Accordingly, Applicant respectfully submits that claim 36 is in condition for allowance.

Claims 11-13, 23 and 25 are Patentable Over the Art of Record

For substantially similar reasons to those set forth above with respect to claim 1, claim 11 is patentable over the art of record. Specifically, the art of record does not disclose or suggest a method of selectively perforating sheets of paper of a group of sheets, **wherein sheets to be perforated are selected as the group is moving successively through a perforation device**, the perforation being along a direction of the movement, the perforation device including a perforating tool having a perforating position in which a sheet of paper is perforated and a neutral position in which a sheet of paper is not perforated, the device further including a control unit to control the perforating tool, the method comprising acts of: successively receiving the moving sheets at the perforating device; **as the group of sheets moves through the perforation device, for each received sheet, receiving at the control unit a first control signal based on information specific to the received sheet**; sending a second control signal from the control unit to the perforating tool to set the perforating tool into the perforating position if, based on the first control signal, a received sheet to be perforated enters the perforating device; and perforating the received sheet along the direction of movement in accordance with the second control signal to produce a perforated sheet, as recited in claim 11.

For at least the reasons set forth above, claim 11 is patentable over the art of record. Accordingly, Applicant respectfully submits that claim 11 is in condition for allowance.

Claims 12, 13, 23 and 25, which each depend directly or indirectly from claim 11, are patentable over the art of record for at least the same reason stated above with respect to claim 11. Accordingly, Applicant respectfully submits that claims 12, 13, 23 and 25 are in condition for allowance.

Further, claim 23 is patentable over the art of record because the art of record does not disclose or suggest the method as recited in claim 11, wherein, for each received sheet, the act of receiving first control the signal includes reading a code on the sheet with a reader, as recited in claim 23.

Claims 14-22, 26 and 37 are Patentable Over the Art of Record

For substantially similar reasons to those set forth above with respect to claim 1, claim 14 is patentable over the art of record. Specifically, the art of record does not disclose or suggest a method of selectively perforating sheets of paper of a group of sheets, wherein

sheets to be perforated are selected as the group is moving successively through a perforating device, the perforating device including a first perforating tool for perforating sheets of paper and a control unit for controlling the perforating tool, wherein the first perforating tool perforates the paper along a direction of the movement of the sheets, the method comprising acts of: successively receiving a plurality of sheets of paper as input to the perforating device; and positioning the first perforating tool in either a perforating position to perforate paper or a neutral position to allow paper to pass unperforated, including: **as the group of sheets moves through the perforation device, for at least a first sheet, receiving at the control unit a first control signal based on information specific to the first sheet**; sending, based on the first control signal, a second control signal from the control unit to the first perforating tool to cause the first perforating tool to assume the perforating position; and in response to receiving the second control signal from the control unit, actuating the first perforating tool to assume the perforating position while the first sheet passes, as recited in claim 14.

For at least the reasons set forth above, claim 14 is patentable over the art of record. Accordingly, Applicant respectfully submits that claim 14 is in condition for allowance.

Claims 15-22, 26 and 37 which each depend directly or indirectly from claim 14, are patentable over the art of record for at least the same reason stated above with respect to claim 14. Accordingly, Applicant respectfully submits that claims 15-22, 26 and 37 are in condition for allowance.

Further, claim 17 is patentable over the art of record because the art of record does not disclose or suggest the method as recited in claim 14, wherein the first control signal is received from a reader that reads codes from the sheets of paper, as recited in claim 17.

Claim 37, which depends directly from claim 17, is patentable over the art of record for at least the same reason stated above with respect to claim 17. Accordingly, Applicant respectfully submits that claim 17 is in condition for allowance.

Further, claim 37 is patentable over the art of record because the art of record does not disclose or suggest the method as recited in claim 17, wherein the method further comprises an act of, for at least the first sheet, reading a code from the first sheet on which the first control signal is based, as recited in claim 37.

Claims 27-33 and 38 are Patentable Over the Art of Record

For substantially similar reasons to those set forth above with respect to claim 1, claim 27 is patentable over the art of record. Specifically, the art of record does not disclose or suggest a system for selectively perforating sheets of paper of a group of sheets, wherein **sheets to be perforated are selected as the group is moving successively through a perforating device**, the perforating device including a first perforating tool for perforating paper and a control unit for controlling the perforating tool, wherein the first perforating tool perforates the paper along a direction of the movement of the sheets, the system comprising: means for successively receiving a plurality of sheets of paper as input to the perforating device; and means for positioning the first perforating tool in either a perforating position to perforate paper or a neutral position to allow paper to pass unperforated, including: **means for receiving at the control unit as the group of sheets moves through the perforation device, for at least a first sheet, a first control signal based on information specific to the first sheet**; means for sending, based on the first control signal, a second control signal from the control unit to the first perforating tool, to cause the first perforating tool to assume the perforating position; and means for actuating, in response to receiving the control signal from the control unit, the first perforating tool to assume the perforating position while the first sheet passes, as recited in claim 27.

For at least the reasons set forth above, claim 27 is patentable over the art of record. Accordingly, Applicant respectfully submits that claim 27 is in condition for allowance.

Claims 28-33 and 38, which each depend directly or indirectly from claim 27, are patentable over the art of record for at least the same reason stated above with respect to claim 27. Accordingly, Applicant respectfully submits that claims 28-33 and 38 are in condition for allowance.

Further, claim 30 is patentable over the art of record because the art of record does not disclose or suggest the system as recited in claim 27, wherein the first control signal is received from a reader that reads a code from the at least first sheet of paper, as recited in claim 30.

Claim 38, which depends directly from claim 30, is patentable over the art of record for at least the same reason stated above with respect to claim 30. Accordingly, Applicant respectfully submits that claim 38 is in condition for allowance.

Further, claim 38 is patentable over the art of record because the art of record does not disclose or suggest the system as recited in claim 30, wherein the system includes the reader, as recited in claim 38.

CONCLUSION

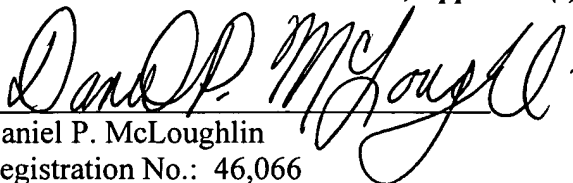
In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicant's attorney at the telephone number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Respectfully submitted

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MARKED-UP WRITTEN DESCRIPTION OF THE SPECIFICATION

Please replace the paragraph beginning on page 2, line 16 as follows:

There may also be several, for instance, two, perforating tools. This allows a corresponding number of perforations, e.g. two perforations, to be performed simultaneously.

Please replace the paragraph beginning on page 2, line 28 as follows:

The accompanying drawings pertain to the special description of the invention. In the drawings

[- figure]Fig. 1 is a schematic view of the perforation process;

[- figure]Fig. 2 shows a printout unit to which a perforation unit has been connected;

[- figure]Fig. 3 illustrates selective perforation of a letter with many pages; and

[- figure]Fig. 4 is a front view of the perforation unit.

Please replace the paragraph beginning on page 3 line 10 as follows.

In the first step in figure 1, paper 1 is about to enter perforation unit 2. If the paper is to be perforated, the actuator of the perforation unit is given a signal to lower perforation disc 3 for the time the paper passes in front of the disc (step 2). Thus a perforation 5 in the direction of movement is produced on the paper. When the paper has passed by the disc, the disc will automatically rise to its upper position (step 3). If no perforation is desired, the perforation unit is not given any signal, the paper passing then through the unit with the perforation disc constantly at a distance from the paper.

Please replace the paragraph beginning on page 3 line 17 as follows:

Figure 2 illustrates a configuration where perforating unit 2 is placed in printout unit 6. In this configuration, paper is taken from reel 7, is cut into sheets [I]1 and the desired message is printed on the sheets with printer 8. The printout is controlled by means of computer 9 and control unit 10. If perforation is desired on the sheet, a signal 11 is emitted from the control unit to the perforation unit. The perforated sheets are stacked in a pile 12 and transferred to a mailing machine, for instance.

Please replace the paragraph beginning on page 4, line 3 as follows:

The opposing roll 4 of perforation disc 3 is flat, i.e. it has no groove matching the disc.
In this manner, there will be no relief on the paper, which could hamper any further handling of the paper.

MARKED-UP CLAIMS

1. (Once Amended) A perforator for selectively perforating sheets of paper of a group of sheets, wherein sheets to be perforated are selected as the group is [that are] moving successively through the perforator, the perforation being along a direction of the movement, the perforator comprising:

a first perforating tool past which one or more sheets of paper move successively, the first perforating tool having a perforating position to perforate paper passing the perforating tool, and having a neutral position to refrain from perforating paper passing the perforating tool, and having an input for receiving a first control signal; and

an electronic control apparatus having an input to receive a second control signal as the group of sheets moves through the perforator, and an output connected to the input of the first perforating tool, wherein, for each sheet of paper that passes the first perforating device, the second control signal is based on information specific [corresponds] to the sheet, and

wherein, the electronic control apparatus is configured such that, for each sheet of paper that passes the first perforating device, if perforation is desired for the sheet based on the second control signal, the electronic control apparatus emits a signal from the output of the electronic control apparatus to the input of the first perforating tool to place the first perforating tool in the perforating position, and if perforation is not desired for the page based on the second control signal, the electronic control apparatus does not emit a signal to the first perforating tool.

11. (Once Amended) A method of selectively perforating sheets of paper of a group of sheets, wherein sheets to be perforated are selected as the group is [that are] moving successively through a perforation device, the perforation being along a direction of the movement, the perforation device including a perforating tool having a perforating position in which a sheet of paper is perforated and a neutral position in which a sheet of paper is not perforated, the device further including a control unit to control the perforating tool, the method comprising acts of:

successively receiving the moving sheets at the perforating device;

as the group of sheets moves through the perforation device, for each received sheet, receiving at the control unit a first control signal based on information specific [corresponding] to the received sheet;

sending a second control signal from the control unit to the perforating tool to set the perforating tool into the perforating position if, based on the first control signal, a received sheet to be perforated enters the perforating device; and

perforating the received sheet along the direction of movement in accordance with the second control signal to produce a perforated sheet.

12. (Once Amended) A method according to claim 11, wherein the act of receiving the first control signal includes:

receiving the first control signal from a printer output data.

14. (Once Amended) A method of selectively perforating sheets of paper of a group of sheets, wherein sheets to be perforated are selected as the group is moving successively through a perforating device, the perforating device including a first perforating tool for perforating sheets of paper and a control unit for controlling the perforating tool, wherein the first perforating tool perforates the paper along a direction of the movement of the sheets, the method comprising acts of:

successively receiving a plurality of sheets of paper as input to the perforating device;
and

positioning the first perforating tool in either a perforating position to perforate paper or a neutral position to allow paper to pass unperforated, including:

as the group of sheets moves through the perforation device, for at least a first sheet, receiving at the control unit a first control signal based on information specific [corresponding] to the first sheet;

sending, based on the first control signal, a second control signal from the control unit to the first perforating tool to cause the first perforating tool to assume the perforating position; and

in response to receiving the second control signal from the control unit, actuating the first perforating tool to assume the perforating position while the first sheet passes.

15. (Once Amended) The method of claim 14, wherein the act of positioning includes:

maintaining the first perforating tool in the neutral position if no second control signal is received at the first perforation tool.

16. (Once Amended) The method of claim 14, [further comprising an act of:
controlling the control unit with a second] wherein the first control signal is received from a data signal output of a printer.

17. (Once Amended) The method of claim 14, [further comprising an act of:
controlling the control unit with a second] wherein the first control signal is received from a reader that reads codes from the sheets of paper.

20. (Once Amended) The method according to claim 14[12], further comprising an act of:
transferring the sheets to a mailing machine after the act of perforating.

21. (Once Amended) The method of claim 14[20], wherein the act of receiving the first control signal includes:
receiving the first control signal from printer output data.

22. (Once Amended) The method of claim 14[20], wherein the act of receiving the first control signal includes:
reading a code in the sheets with a reader.

23. (Once Amended) The method of claim 11, wherein, for each received sheet, the act of receiving first control the signal includes:
reading a code [in] on the sheet[sheets] with a reader.

27. (Once Amended) A system for selectively perforating sheets of paper of a group of sheets, wherein sheets to be perforated are selected as the group is moving successively through a perforating device, the perforating device including a first perforating tool for perforating paper and a control unit for controlling the perforating tool, wherein the first perforating tool perforates the paper along a direction of the movement of the sheets, the system comprising:

means for successively receiving a plurality of sheets of paper as input to the perforating device; and

means for positioning the first perforating tool in either a perforating position to perforate paper or a neutral position to allow paper to pass unperforated, including:

means for receiving at the control unit as the group of sheets moves through the perforation device, for at least a first sheet, a first control signal based on information specific [corresponding] to the first sheet;

means for sending, based on the first control signal, a second control signal from the control unit to the first perforating tool, to cause the first perforating tool to assume the perforating position; and

means for actuating, in response to receiving the control signal from the control unit, the first perforating tool to assume the perforating position while the first sheet passes.

29. (Once Amended) The system of claim 27, wherein the [control unit is controlled by a second]first control signal is received from a data signal output of a printer.

30. (Once Amended) The system of claim 27, wherein the [control unit is controlled by a second]first control signal is received from a reader that reads a code[codes] from the at least first sheet[sheets] of paper.

33. (Once Amended) The system of claim 27, wherein:

the first control signal indicates that the first perforation tool is to assume the perforating position for a first duration;

the means for actuating includes[:] means for actuating the first perforation tool to assume the perforating position for the first duration and returning the first perforation tool to the neutral position after the first duration has elapsed to produce a perforation of a desired length; and

the desired length of the perforation is different for two or more of the perforated sheets.